

EXHIBIT 4

Declaration of Jonathan Paschal

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION**

THE STATE OF OHIO, ex rel. DAVE YOST,
OHIO ATTORNEY GENERAL,

and

THE UNITED STATES OF AMERICA,

Plaintiffs,

v.

NORFOLK SOUTHERN CORPORATION and
NORFOLK SOUTHERN RAILWAY COMPANY,

Defendants.

Civil Action No. 4:23CV517

4:23CV675

Hon. John R. Adams

**DECLARATION OF JONATHAN M. PASCHAL IN SUPPORT OF THE
UNITED STATES' MOTION TO ENTER CONSENT DECREE**

I, Jonathan M. Paschal, declare as follows:

1. I am a Senior Director at Epiq Systems, Inc. (“Epiq”). Epiq has been engaged to serve as Administrator of the Community Health Program (“CHP”) set forth in paragraphs 48 to 55 and Appendix C of the proposed Consent Decree, which was lodged with this Court on May 23, 2024. Epiq also serves as the Fund Administrator of the interest-bearing \$25,000,000 CHP Fund under an escrow agreement by and among Norfolk Southern, Epiq, and U.S Bank, dated June 24, 2024. I make this declaration based upon my personal knowledge, and I am competent to testify as to its contents.

2. Epiq is a worldwide provider of legal and business services with more than 6,000 employees serving in 18 countries. Epiq’s Medical Monitoring and Consulting team has extensive experience administering medical monitoring and consultation programs as a court-appointed neutral, activities that I have overseen since 2012. During that time, Epiq has facilitated the delivery of more than 19,000 participant medical appointments as administrator of large medical monitoring programs. These include the Periodic Medical Consultation Program for eligible local residents and former oil-spill clean-up workers related to the *Deepwater Horizon* Medical Benefits Class Action Settlement, which provides free, periodic medical examinations; the Baseline Assessment Program for retired National Football League (NFL) football players participating in the NFL Players’ Concussion Injury Litigation Class Action Settlement, which provides free, neuropsychological and neurological examinations; and the NCAA Medical Monitoring Program for former student-athletes participating in the National Collegiate Athletic Association Student-Athlete Concussion Injury Litigation Class Action Settlement, which offers free neuropsychological and neurological examinations.

Community Health Program

3. Paragraphs 48 through 53 and Appendix C of the Consent Decree set forth obligations to provide the Community Health Program, which is intended to provide certain medical and mental health services for up to 20 years to individuals who resided in the area near the February 3, 2023, train derailment in East Palestine, Ohio, and first responders who responded to the derailment during February 2023. The CHP consists of a Medical Monitoring Program to allow participants to monitor their health, and Mental Health Services to provide counseling from certified mental health care providers. The Consent Decree also provides facilitation support (“Community Facilitation”) to advise and assist community members in accessing the CHP. Paragraph 48 of the Consent Decree allocates the following amounts for the initial 15 years of the Consent Decree – \$14,000,000 plus the accrued interest from the CHP Fund for the Medical Monitoring Program, \$5,500,000 for Mental Health Services, and \$500,000 for Community Facilitation.¹

4. Based on Epiq’s experience administering large medical monitoring programs, I developed cost estimates and other assumptions for the CHP set forth in the proposed Consent Decree. For the proposed Medical Monitoring Program portion of the CHP, I derived cost estimates by estimating the number of eligible individuals covered by the Consent Decree, the projected rates at which they would participate in the program, the duration of the program, the number of medical examinations and related services offered (“Medical Monitoring Exams”) per participating individual, the average cost per Medical Monitoring Exam, and the estimated costs associated with administering the program. For the proposed Mental Health Services portion of

¹ Because paragraph 55 of the Consent Decree provides for a reassessment following the 14th anniversary of the Effective Date to determine the benefits offered by the CHP in Consent Decree years 16-20, I developed cost estimates only for costs that would be incurred during Consent Decree years 1-15. This declaration describes the analysis involved in developing those cost estimates.

the CHP, I assumed future costs similar to those incurred by Norfolk Southern to provide mental health services to residents living in and around East Palestine between April 2023 and July 2024.

Medical Monitoring Program

5. The purpose of the Medical Monitoring Program is to “provide medical exams to enable Qualified Individuals (Monitoring) to monitor their health.”² Paragraph 50 of the Consent Decree defines “Qualified Individual (Monitoring)” as (1) individuals who at any point between February 3, 2023, and May 23, 2024, resided within two miles of the Derailment Area (as defined in the Consent Decree), (2) individuals who at any point between February 3, 2023, and May 23, 2024, resided within 250 feet from the centerline (in both directions) of Leslie Run from the confluence of Sulphur Run to the confluence of Bull Run, (3) first responders present at the Site (as defined in the Consent Decree) in February 2023, and (4) other individuals admitted on a case-by-case basis in accordance with the terms set forth in Appendix C of the Consent Decree. The Consent Decree refers collectively to individuals who meet at least one of the first three criteria as “Automatic Qualifiers.” The Medical Monitoring Program offers Qualified Individual (Monitoring) the opportunity to receive up to ten Medical Monitoring Exams during the initial 15 years of the Community Health Program.

6. To estimate the number of Automatic Qualifiers, I performed three separate analyses, one for the number of individuals residing within two miles of the Derailment Area, a second for the number of individuals residing within 250 feet from the centerline (in both directions) of Leslie Run between Sulphur Run and Bull Run, and a third for the number of first responders who worked in the area in February 2023. I did not estimate the number of case-by-case participants, since the number of individuals who will apply to participate on a case-by-case

² Consent Decree, paragraph 48.

basis is unknown and, pursuant to Appendix C of the Consent Decree, the number of individuals allowed to participate on a case-by-case basis will depend on whether the Administrator determines that sufficient funds remain to cover Medical Monitoring Exams for all interested Automatic Qualifiers.

7. For estimates of the number of individuals residing within two miles of the Derailment Area, I relied upon data from the Missouri Census Data Center (MCDC).³ The MCDC works in partnership with the U.S. Census Bureau through the State Data Center Program, which was established in 1978 and which the U.S. Census Bureau describes as “one of the Census Bureau’s longest and most successful partnerships.”⁴ Among the data applications offered by the MCDC is the Circular Area Profiles tool,⁵ which allows a user to enter the latitude and longitude for any location to receive an estimate based on 2020 U.S. Census data regarding the number of individuals residing within various radii. Entering the latitude and longitude of the Derailment Area returned an estimated number of individuals residing within a two-mile radius of 5,412.

8. For estimates of the number of individuals residing within 250 feet from the centerline (in both directions) of Leslie Run between Sulphur Run and Bull Run, I relied upon aerial mapping of the area to count buildings that could serve as dwellings. This analysis, which excluded buildings near Leslie Run between Sulphur Run and Bull Run that also fell within a two-mile radius of the Derailment Area (to avoid double-counting), identified 65 such buildings. Assuming an average of 2.5 persons per household, which is consistent with U.S. Census data for the area, I estimated approximately 163 individuals resided in this area as of May 2024.

³ See <https://mcdc.missouri.edu/>

⁴ See <https://www.census.gov/about/partners/sdc/about.html>

⁵ See <https://mcdc.missouri.edu/applications/caps2020.html> (last accessed September 20, 2024)

9. In estimating the number of first responders working at the Site in February 2023, I relied upon Norfolk Southern's records of first responder organizations that worked at Site and that Norfolk Southern subsequently reimbursed for their protective gear used during the response. Those records indicated that 596 first responders worked at the Site in February 2023.

10. After estimating the total eligible population, I projected the percentage of that population that would participate in the Medical Monitoring Program. To project participation rates for local residents (both those within the two-mile radius and those living in the vicinity of Leslie Run), I reviewed participation data for programs similar to the proposed Medical Monitoring Program. These included the *Deepwater Horizon* Periodic Medical Consultation Program offered to Gulf Coast residents and clean-up workers affected by the *Deepwater Horizon* oil spill; the C-8 Medical Monitoring Program offered to individuals in West Virginia and Ohio affected by exposure to contaminated water supplies attributable to releases from DuPont's Washington Works Plant in Wood County, West Virginia; and the Fernald Medical Monitoring Program offered to individuals living within a five-mile radius of a U.S. Department of Energy uranium metal plant in Fernald, Ohio, who were exposed to radiation emitted from the plant.

11. After reviewing these programs, I selected the Fernald Medical Monitoring Program as the program best suited for modeling participation rates in the proposed East Palestine Medical Monitoring Program.⁶ Unlike most medical monitoring programs, the Fernald Medical Monitoring Program has published long-term participation for multiple examinations available to each participant. The Fernald program and proposed East Palestine program also share a number of similarities:

⁶ The information in the following paragraphs is taken from "Medical Monitoring: A Beneficial Remedy for Residents Living near an Environmental Hazard Site" at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2868344/>.

a. Both are multi-year programs that offer participants several examinations, and both are environmental exposure cases in geographically compact, low-density population areas. Specifically, the Fernald program was an 18-year program that offered an initial exam at program inception, followed by re-exams available to participants every three years for three exam cycles, then every two years for an additional four exam cycles. In total, participants were offered up to eight exams over an 18-year period. Although the nature of the environmental exposure is different (Fernald was a uranium processing plant that exposed local residents to radiation over several decades, while the East Palestine program responds to potential exposure from a single event), the nature of the population distribution is similar.

b. The intent of the Fernald program and the proposed East Palestine program are almost identical. The Fernald program “focused on general health promotion rather than the effects of uranium.”⁷ Moreover, “[t]he nearby residents’ emotional distress was related primarily to the *potential* for harmful health effects resulting from environmental releases. A medical monitoring program to identify disease if present or to reassure those found to be healthy was one way to mitigate the emotional distress suffered by class members.”⁸

12. Based on data from the Fernald program, I estimated that approximately 25% of local residents would participate in the Medical Monitoring Program during the first three years of

⁷ *Id.*

⁸ *Id.* (emphasis in original).

the program, followed by a 23% decrease from baseline participation in years four through six and a 50% decline from baseline participation in the remaining years of the program.⁹

13. Based on input from Chief Keith Drabick of the East Palestine Fire Department and Ms. Peggy Clark from the Columbiana County Emergency Management Agency regarding the level of first-responder interest in participating in the Medical Monitoring program, I modeled higher participation rates for first responders than for the local population. Because models of comparable first-responder (or other similar) populations were not available for use, I assumed a 75% participation rate for first responders for Medical Monitoring Exams in year 1 of the program, followed by 50% in year 2 and 25% in subsequent years. These rates are all substantially higher than participation rates observed in the Fernald program.

14. After modeling participation rates separately for local residents and first responders, I combined them to obtain a weighted average, based on the number of estimated individuals in each group. The estimated overall (weighted) participation rates that were calculated were approximately 30% in year 1, 27.5% in year 2, 25% in year 3, 20% in years 4-6, and 13.7% in years 7-15.

15. To estimate the timing of when participating Qualified Individuals (Monitoring) would schedule Medical Monitoring Exams during the first 15 years of the program, I assumed that those individuals would receive an exam every year for the first five years of the program, then average an exam once every two years during the ten-year period between years 6 through 15 (inclusive), resulting in ten Medical Monitoring Exams. Because higher participation rates are assumed early in the program, this assumed distribution has the effect of estimating a higher total

⁹ In addition to bearing the most similarities to the proposed East Palestine program, Fernald also had higher initial participation rates than the *Deepwater Horizon* and C-8 programs, which were 15% and 2%, respectively, of the eligible populations, making the Fernald program a more conservative choice for the participation model.

number of Medical Monitoring Exams to be taken compared to a model that distributes ten Medical Monitoring Exams evenly over the first 15 years of the program.

16. In all, the use of a high-participation program as the basis for the cost model, combined with an assumed higher participation rate for first responders and an assumed once-per-year average of Medical Monitoring Exams during the first five years of the program results in a conservative estimate that should be at the top of the range of what could be expected for the program. I believe that this is appropriate, given the importance of ensuring funding is sufficient for even a high participation rate.

17. In estimating the average cost per Medical Monitoring Exam, I relied upon a 2022 Congressional Budget Office report, “The Prices That Commercial Health Insurers and Medicare Pay for Hospitals’ and Physicians’ Services.”¹⁰ This report found that private health insurers pay an average of between 118% and 163% of Medicare reimbursements for physician services and an average between 155% and 293% of Medicare reimbursements for outpatient services.

18. Taking a conservative approach, I estimated payments at the top of the physician services range (163% of Medicare reimbursement) and assumed that the Medical Monitoring Exam would last 60 minutes. Applying these assumptions to Medicare reimbursement rates for a 60-minute physical exam¹¹ resulted in an estimated reimbursement of \$360.13 per Medical Monitoring Exam for the physical examination itself. Similarly, I estimated payments at the top of the outpatient services range (293% of Medicare reimbursement) for the remaining services. Multiplying the Medicare reimbursement rates for the remaining services by 293% resulted in an estimated cost for those services of \$453.21 per Medical Monitoring Exam and an estimated total

¹⁰ <https://www.cbo.gov/publication/57422>

¹¹ Medicare reimbursement rates can be found at <https://www.cms.gov/medicare/payment/fee-schedules>.

cost of \$813.34 per Medical Monitoring Exam. This is a conservative approach, given that all covered services will likely not be medically indicated, and thus not administered, during every Medical Monitoring Exam.¹²

19. To estimate medical inflation for these services over the life of the program, I relied upon U.S. Bureau of Labor Statistics (BLS) Consumer Price Index data series. Averaging the ten-year annual change in the price of physician services (BLS Series ID CUUR0000SEMC01) of 1.50% with the ten-year annual change in the price of medical care (BLS Series ID CUUR0000SAM) of 2.57% resulted in an overall average of 2.035%, which I applied annually to the estimated provider reimbursement costs.

20. In estimating the costs of administration of the Medical Monitoring Program, I combined estimates of fixed and variable costs to arrive at the overall estimate. Fixed costs represent work that is independent of the number of participants and includes recruiting and managing relationships with healthcare organizations and maintaining computer systems and data infrastructure. Variable costs include call center staffing, provider invoice processing, and handling program participant and provider inquiries. When combined, overall administrative costs for the Medical Monitoring Program are estimated at approximately 32.1% of all Medical Monitoring Program costs, which is consistent with Epiq's experience administering other programs.

21. In total, calculating costs based on the estimated number of Automatic Qualifiers described in paragraphs 6 through 9 above, the projected Automatic Qualifier participation rates described in paragraphs 10 through 14, the estimated frequency of Medical Monitoring Exams

¹² For example, although these calculations assume that a chest x-ray will be administered at every Medical Monitoring Exam, this is unlikely because providers will likely sometimes decide that a chest x-ray is not medically indicated because the expected benefit would not outweigh the incremental radiation exposure.

described in paragraph 15, the estimated average cost per Medical Monitoring Exam described in paragraphs 17 and 18, the projected medical inflation described in paragraph 19, and the estimated administrative costs described in paragraph 20, I estimated an approximate total cost of \$13,960,140 for the Medical Monitoring Program for Automatic Qualifiers during Consent Decree years 1-15. As described above, the assumptions I made with respect to these estimates are conservative and, accordingly, the actual cost of the Medical Monitoring Program for Automatic Qualifiers during Consent Decree years 1-15 may be lower than this figure. The \$14,000,000 allocated to the Medical Monitoring Program in paragraph 48 of the Consent Decree, not including accrued interest from the CHP Fund, would thus be sufficient to cover the estimated cost of the Medical Monitoring Program for Automatic Qualifiers during Consent Decree years 1-15.

22. As stated in paragraph 3 above, the Consent Decree allocates \$14,000,000 plus accrued interest from the \$25,000,000 CHP Fund to pay for the Medical Monitoring Program in Consent Decree years 1-15. Based on a current CHP Fund annual interest rate of 4.56% and conservative assumptions about a decline in prevailing interest rates over the coming years until interest paid to the CHP Fund reaches an annual rate of 1.5%, I estimated that the interest from the CHP Fund could pay for approximately 550 case-by-case Qualified Individuals (Monitoring) during Consent Decree years 1-15. Pursuant to Appendix C of the Consent Decree, however, Epiq will work to confirm adequate funding for all interested Automatic Qualifiers before making the Medical Monitoring Program available to case-by-case Qualified Individuals (Monitoring).

Mental Health Services

23. My cost estimates assumed future costs for the proposed Mental Health Services portion of the CHP similar to those incurred by Norfolk Southern for such services in the months following the February 3, 2023, derailment. Beginning in April 2023, Norfolk Southern worked

with a local mental health provider to pay counseling expenses for local residents and first responders affected by the derailment that were not covered by those individuals' insurance. Put another way, Norfolk Southern covered all out-of-pocket expenses for individuals receiving applicable counseling through this mental health provider.

24. During the first 16 months of Norfolk Southern's efforts, Norfolk Southern's reimbursements to this local mental health provider totaled \$170,213.89, or \$10,638 per month. Projecting this amount over a 15-year period and adjusting for medical inflation of 2.035% (see paragraph 19), such services would cost a total of \$2,213,199 during Consent Decree years 1-15. Under those assumptions, and even assuming that all participants in Mental Health Services continue to receive counseling at the same rate throughout Consent Decree years 1-15, the \$5,500,000 allocated for Mental Health Services in Consent Decree years 1-15 would be sufficient even if the rate of the eligible population's participation in Mental Health Services was approximately 2.5-fold higher than the rate observed in the first 16 months after the derailment.

I declare under penalty of perjury under the laws of the State of North Carolina that the foregoing is true and correct.

EXECUTED on this 1st day of October 2024, at Charlotte, North Carolina.

/s/ Jonathan M. Paschal
Jonathan M. Paschal
Senior Director
Epiq